

REMARKS

After the foregoing Amendment, claims 1-25, as amended, are pending in this application. Claim 1 has been amended to more particularly point out and distinctly claim the subject matter which Applicants regard as the invention. Claims 24-25 are new. Applicants submit that no new matter has been added to the application.

Applicants respectfully request that the Amendment After Final be entered in accordance with 37 CFR §116 and MPEP 714.13 since: (1) no new matter has been added to the application by the Amendment; (2) the Amendment resolves all issues raised by the Examiner in the Final Office Action; (3) the subject matter of the Amendment already has been included in the Examiner's search and therefore does not require the Examiner to perform further searching; (4) the Amendment places the application in condition for allowance or in better form for appeal and (5) the Amendment does not result in a net addition of claims to the application. Applicants submit that no new matter has been added to the application by the Amendment.

Claim Rejections – 35 U.S.C. § 102

Claims 1-23 were rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,996,817 (Birum et al.).

In respect to claim 1, the Examiner states that Birum et al. at col. 1, lines 54-61 discloses receiving those of said absent updated software versions determined in step (d) to have been included in said unselected user terminals; and receiving those of said absent updated software versions determined in step (d) to have not been included in said unselected user terminals. Applicants respectfully disagree that Birum et al. discloses the above features and traverse the rejection.

Birum et al. is directed to a method of changing the current version of an application residing on a client to a new (or an old) version by distributing the new version over the Internet. In addressing the problem to be solved at col. 1, lines 23-34, Birum et al. states that a problem arises when the bandwidth of the Internet connection is low (i.e. 512Kbs) and the new version is so large that it would take an inordinate amount of time to transfer the new version to the client or it would require an inordinate amount of memory in the client to store the new version. The approach Birum et al. identifies for solving this problem is to first identify the individual

programs or sub-programs (referred to by Birum et al. as resources), that constitute the current version and that constitute the new version to be adopted, and second distribute from the content server, only those resources to the client that are not in the client's current version. Thus, because many resources would be identical between the client's current version and the new version, the new version can be distributed from the content server in a shorter period of time and also use less storage in the client.

The problem addressed by the present invention is the overloading of a server when the server is required to frequently download new versions of applications to a large number of user terminals (i.e. clients). In order to solve this problem, the present invention determines for each client, the software versions that are available from user terminals other than the server that reside in the same sub-net as the client. Consequently, in an embodiment of the invention, a user terminal wishing to have software upgraded, requests from the server a list of updated software versions that are absent from the user terminal, determines from the list which of updated software versions are available from the server and from one or more other user terminals and receives the updated versions from the one or more of the other user terminals that include the updated versions. Consequently, the client receives from the server only those updated versions that are not available from other user terminals, thus relieving the server of load.

Claim 1 has been amended to clarify that the updated software is received from a server only when the updated software is not available from another user terminal:

1. *A method of software upgrade control for a system server and a sub-network including a plurality of user terminals, the method comprising the steps of:*
 - (a) providing said system server with updated software versions;*
 - (b) selecting one of said plurality of user terminals;*
 - (c) requesting from said system server a list of said updated software versions that are absent in said selected one of said plurality of user terminals;*
 - (d) determining from the list which of said plurality of user terminals unselected in step (b) include any of said absent updated software versions;*

(e) receiving from said unselected ones of said plurality of user terminals said absent updated software versions determined in step (d) to have been included in said unselected ones of said plurality of user terminals;

(f) receiving from said server those of said absent updated software versions determined in step (d) to have not been included in said unselected ones of said plurality of user terminals; and

(g) upgrading said selected one of said user terminals with said received absent updated software versions.

As discussed above, Birum et al. merely discloses a client and a content server from which a software update for the client may be obtained, albeit in segments. Birum et al. does not disclose either: (1) determining from a list provided by a system server whether a software upgrade is available from another terminal other than the server, or (2) receiving software versions from a terminal other than the server if available, and if not available from another terminal only then receiving the software version from the server, as recited in amended claim 1.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the § 102 rejection of claim 1.

Further, it is respectfully submitted that since claim 1 has been shown to be allowable, claims 2-9 dependent on claim 1 are allowable, at least by their dependency. Accordingly, for all the above reasons, Applicants respectfully request reconsideration and withdrawal of the § 102 rejection of claims 2-9.

In respect to claim 10, the Examiner states, *inter alia*, that Birum et al. discloses a client provided in said first client-server structure of said first user terminal for requesting from said system server a list of said updated software versions that are absent in said first user terminal and also for broadcasting an inquiry to the second user terminal to determine whether the second user terminal has at least one of said updated software versions that are absent in said first user terminal; a first client provided in said second client-server structure of said first user terminal for receiving one of said absent updated software versions from said second user terminal; and a second client provided in said second client-server structure of said first user terminal for

receiving one of said absent updated software versions from said system server. Applicants respectfully disagree that Birum et al. discloses the above features and traverse the rejection.

Birum et al. at Fig. 7 and col. 4, lines 33-56 describes a process used by a client to obtain an application version from a single content server and does not disclose either: (1) broadcasting an inquiry from a first user terminal to a second user terminal to determine whether the second user terminal has updated software and (2) receiving updated software from the second user terminal and from a system server.

Further, Birum et al. at block 705 and col. 4, lines 44-45 and related discussion discloses only a single client in a user terminal and does not disclose first and second clients in a user terminal, the first client for receiving software versions from a second user terminal and a second client for receiving software versions from a system server.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the §102 rejection of claim 10.

Further, it is respectfully submitted that since claim 10 has been shown to be allowable, claims 11-16 dependent on claim 10 are allowable, at least by their dependency. Accordingly, for all the above reasons, Applicants respectfully request reconsideration and withdrawal of the §102 rejection of claims 11-16.

In respect to claim 17, the Examiner states that Birum et al. discloses first and second client-server structures in each user terminal in which: (1) the first client server broadcasts in said sub-network an inquiry as to whether any other user terminals have updated software absent therein and (2) receives updated software from one of said other user terminals and from the system server if no other user terminals have said absent software, and (2) the second client server transmits updated software to one of the other terminals and receives updated software from one of said other user terminals and from the system server if no other user terminals have said absent software. Applicants respectfully disagree that Birum et al. discloses the above features and traverse the rejection.

As discussed above, Birum et al. discloses only a single client in each user terminal and does not disclose that each user terminal includes first and second client servers, where the first client server broadcasts to a second user terminal an inquiry as to whether the second user

terminal has updated software and a second client server which transmits updated software to one of the other terminals and receives updated software from one of said other user terminals and from the system server if no other user terminals have said absent software.

Accordingly, Applicants respectfully request reconsideration and withdrawal of the §102 rejection of claim 17.

Further, it is respectfully submitted that since claim 17 has been shown to be allowable, claims 18-23 dependent on claim 17 are allowable, at least by their dependency. Accordingly, for all the above reasons, Applicants respectfully request reconsideration and withdrawal of the §102 rejection of claims 17-23.

New Claims 24-25

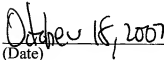
New claims 24-25 are supported by the application at least paragraphs [024] and [033] and are not taught or suggested by Birum et al. Accordingly, Applicants respectfully request allowance of new claims 24-25.

Conclusion

Insofar as the Examiner's rejections were fully addressed, the present application is in condition for allowance. Issuance of a Notice of Allowability of all pending claims is therefore requested.

Respectfully submitted,

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